



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY
AFFAIRS (PERA)

BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY, FLORIDA
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208

Miami, Florida 33175-2474

T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/pera/

Atrium Companies, Inc.

9001 Ambassador Row

Dallas, TX 75247

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (in Miami-Dade County) and/or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "MPSH/ M41-51" Aluminum Single Hung Window - L.M.I.

APPROVAL DOCUMENT: Drawing No. ATR031, titled "MPSH/ M41-51 Alum. Single Hung Window", sheets 1 through 9 of 9, dated 12/07/11 with revision "A" dated 03/14/12, prepared by Building Drops, Inc., signed and sealed by Alexis Spyrou, P. E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and Expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/ series and following statement: "Miami-Dade County Product Control Approved" unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises** NOA No. 10-0729.02 and consists of this page 1, evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Jaime D. Gascon, P. E.**



J. Gascon
3/28/12

NOA No. 12-0117.03

Expiration Date: March 14, 2017

Approval Date: April 05, 2012

Page 1

Atrium Companies, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under previous NOA's No.'s 02-0128.06 and 10-0729.02)
2. Drawing No. ATR031, titled "MPSH/ M41-51 Alum. Single Hung Window", sheets 1 through 9 of 9, dated 12/07/11 with revision "A" dated 03/14/12, prepared by Building Drops, Inc., signed and sealed by Alexis Spyrou, P. E.

B. TESTS

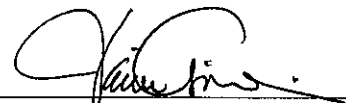
1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of aluminum single hung windows, prepared by Certified Testing Laboratories, Inc., Test Report No. CTLA-2005W, dated 02/24/10, signed and sealed by Ramesh O. Patel, P. E.
(Submitted under previous NOA No. 10-0729.02)
2. Test reports on: 1) Air Infiltration Test, per SFBC, PA 202-94
2) Uniform Static Air Pressure Test, Loading per SFBC, PA 202-94
3) Water Resistance Test, per SFBC, PA 202-94
4) Large Missile Impact Test per SFBC, PA 201-94
5) Cyclic Wind Pressure Loading per SFBC, PA 203-94
6) Forced Entry Test, per SFBC, PA 202-94 and per AAMA 1302.5
along with marked-up drawings and installation diagram of aluminum single hung windows, prepared by Fenestration Testing Laboratory, Inc., Test Reports No.'s FTL-3068 and FTL-3253, dated 05/14/01 and 11/08/01, both signed and sealed by Luis Antonio Figueredo, P. E.
(Submitted under previous NOA No. 02-0128.06)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2007 and FBC-2010, dated 12/23/11, prepared by Building Drops, Inc., dated 03/14/12, signed and sealed by Alexis Spyrou, P. E.
2. Glazing complies with ASTM E1300-98/ 04

D. QUALITY ASSURANCE

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).



Jaime D. Gascón, P. E.
Product Control Section Supervisor
NOA No. 12-0117.03
Expiration Date: March 14, 2017
Approval Date: April 05, 2012

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **11-0624.01** issued to E.I. DuPont DeNemours & Co., Inc. for their "**DuPont Butacite® PVB Interlayer**" dated 09/08/2011, expiring on 12/11/2016.
2. Notice of Acceptance No. **08-0206.01** issued to Solutia Inc. for their "**Saflex HP Glass Interlayer**" dated 04/17/2008, expiring on 04/17/2013.
3. Notice of Acceptance No. **07-0831.06** issued to Cardinal LG for their "**Laminated Glass Cardinal Sea-Storm Type B**", dated 10/11/07, expiring on 12/30/12.

F. STATEMENTS

1. Statement letter of no financial interest, conformance and compliance with the FBC-2007 and FBC-2010, dated December 19, 2011, signed and sealed by Alexis Spyrou, P. E.
2. Proposal No. **09-1541** issued by BCCO, dated November 04, 2009, signed by Manuel Perez, P. E.
(Submitted under previous NOA No. 09-0707.05)
3. Laboratory compliance letter for Test Report No. **CTLA-2005W**, issued by Certified Testing Laboratories, Inc., dated February 24, 2010, signed and sealed by Ramesh O. Patel, P. E.
(Submitted under previous NOA No. 10-0729.02)
4. Laboratory compliance letter for Test Reports No.'s **FTL-3068** and **FTL-3253**, issued by Fenestration Testing Laboratory, Inc., dated 05/14 and 11/08/2001, both signed and sealed by Luis Antonio Figueredo, P. E.
(Submitted under previous NOA No. 02-0128.06)

G. OTHERS

1. Notice of Acceptance No. **10-0729.02**, issued to Atrium Florida, Inc. for their Series "MPSH Aluminum Single Hung Window - L.M.I.", approved on 12/24/10 and expiring on 03/14/12.



Jaime D. Gascon, P. E.
Product Control Section Supervisor
NOA No. 12-0117.03
Expiration Date: March 14, 2017
Approval Date: April 05, 2012

INSTALLATION NOTES:

- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN.
- THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION OF THE MAXIMUM SIZE LISTED.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF $\pm 1/2$ INCH BASED ON QUANTITIES IN DP CHARTS NOT TO EXCEED THE DEPICTED LOCATION & SPACING IN THE ANCHOR LAYOUT DETAILS (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
- SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER.
- THROUGH FRAME:** FOR INSTALLATION INTO WOOD FRAMING USE #14 WOOD SCREWS OF SUFFICIENT LENGTH TO ACHIEVE 1 1/2 INCH MINIMUM EMBEDMENT INTO WOOD SUBSTRATE.
- THROUGH FRAME:** FOR INSTALLATION THROUGH 1X BUCK TO CONCRETE/MASONRY, OR DIRECTLY INTO CONCRETE/MASONRY, USE 1/4 INCH DIAMETER ITW TAPCONS OR 1/4 INCH DIAMETER ELCO ULTRACONS OF SUFFICIENT LENGTH TO ACHIEVE 1 1/4 INCH MINIMUM EMBEDMENT.
- THROUGH FRAME:** FOR INSTALLATION INTO METAL STUD OR APPROVED MULLION USE 1/4-14 ITW TEK SELECT, 1/4-20 DRIL-FLEX SAE GR. 5 BY ELCO, OR 1/4-20 SAE GR. 5 KWIK-FLEX BY HILTI SELF DRILLING SCREWS OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM OF 3 THREADS PENETRATION BEYOND METAL FRAME SUBSTRATE.
- NAIL FIN:** FOR INSTALLATION INTO WOOD FRAMING USE #10 WOOD SCREWS OF SUFFICIENT LENGTH TO ACHIEVE 1 1/2 INCH MINIMUM EMBEDMENT INTO WOOD SUBSTRATE.
- NAIL FIN:** FOR INSTALLATION INTO METAL STUD OR APPROVED MULLION USE #10-16 ELCO DRIL-FLEX SAE GR. 5 OR #10-16 HILTI KWIK-FLEX SAE GR. 5 SELF DRILLING SCREWS OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM OF 3 THREADS PENETRATION BEYOND METAL FRAME SUBSTRATE.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
- INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
- FOR HOLLOW BLOCK AND GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS. EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.
- INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
 - WOOD - MINIMUM SPECIFIC GRAVITY OF 0.55.
 - CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
 - GROUT-FILLED CMU- UNIT STRENGTH CONFORMS TO ASTM C-90 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AND GROUT CONFORMS TO ASTM C 476, MINIMUM GROUT COMPRESSIVE STRENGTH OF 2000 PSI.
 - HOLLOW BLOCK CMU - UNIT STRENGTH CONFORMS TO ASTM C-90 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.
 - STEEL - MINIMUM YIELD STRENGTH OF 36 KSI. MINIMUM WALL THICKNESS OF 59.8 MIL (0.0598" or 16 GAUGE). MIN. 1/2" EDGE DISTANCE.
 - ALUMINUM - MINIMUM ALLOY 6063-T5. MINIMUM WALL THICKNESS OF 1/8" (0.125"). MIN. 1/2" EDGE DISTANCE

GENERAL NOTES:

- THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 2007 & 2010 FLORIDA BUILDING CODE (FBC), INCLUDING HVHZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
 - TAS 201-94
 - TAS 202-94
 - TAS 203-94
- ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY, 2X FRAMING, AND METAL FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT IN NON-HVHZ AREAS. IN HVHZ AREAS, ONE TIME PRODUCT APPROVAL TO BE OBTAINED FROM MIAMI-DADE BNC.
- APPROVED IMPACT PROTECTIVE SYSTEM IS **NOT REQUIRED** ON THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
- WINDOW FRAME MATERIAL: ALUMINUM 6063-T6
- IN ACCORDANCE WITH THE 2007 & 2010 FBC SEC. 2003.8.4 DISSIMILAR METALS INCLUDING FASTENERS THAT MAY COME INTO CONTACT WITH ALUMINUM UNIT FRAMING SHALL BE PROTECTED AS DEFINED IN SEC 2003.8.4.2.
- GLASS MEETS THE REQUIREMENTS OF ASTM E 1300-04 GLASS CHARTS. SEE SHEET 7 FOR GLAZING DETAILS.

ATRIUM COMPANIES, INC.

MPSH/M41-51 ALUMINUM SINGLE HUNG WINDOW (IMPACT)

TABLE OF CONTENTS		
SHEET	REVISION	SHEET DESCRIPTION
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4	A	VERTICAL SECTIONS
5	A	HORIZONTAL SECTIONS
6	A	EQUAL LITE DP TABLES
7	A	UNEQUAL LITE DP TABLES & GLAZING DETAILS
8	A	COMPONENTS & BILL OF MATERIALS
9	A	CORNER SECTION ASSEMBLIES

MISSILE IMPACT RATING

LARGE & SMALL MISSILE IMPACT



9001 AMBASSADOR ROW
DALLAS, TEXAS 75247
PH: (214) 637-2696 FX: (214) 424-6734

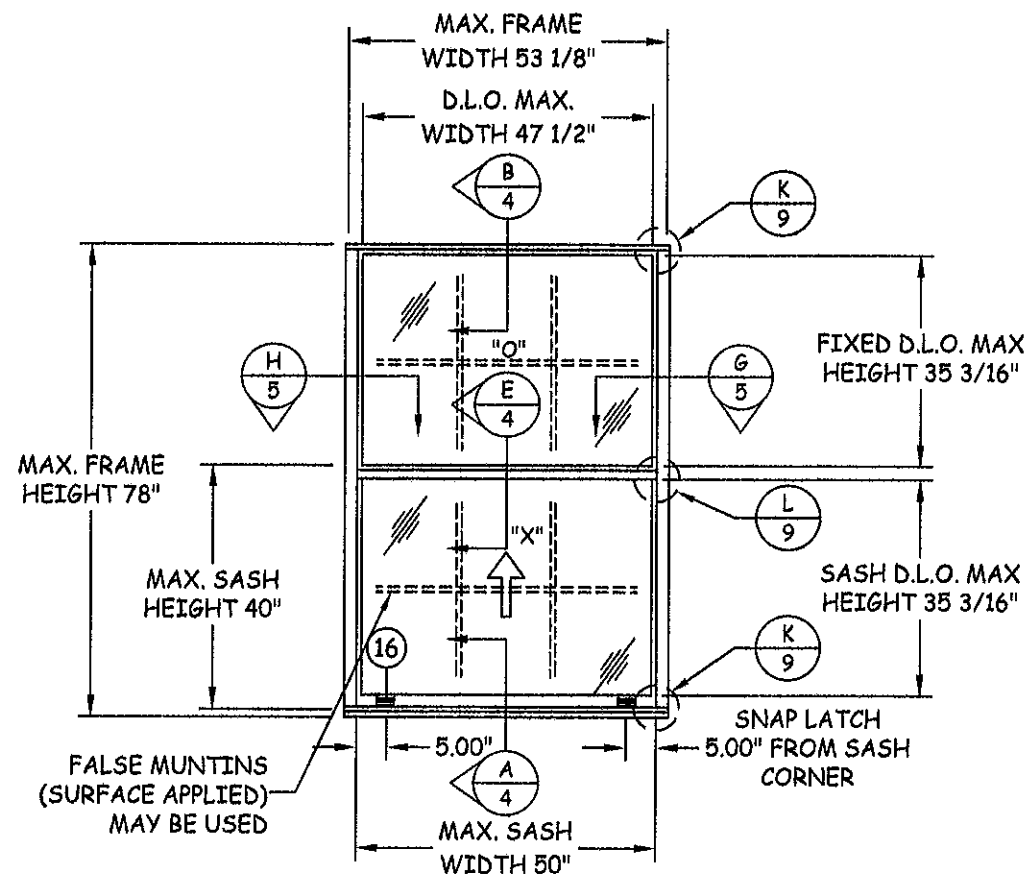
TITLE: MPSH/M41-51 ALUM.
SINGLE HUNG WINDOW
INSTALLATION &
GENERAL NOTES
PREPARED BY: BUILDING DROPS, INC.
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
PH: (407) 644-6957 FX: (407) 644-2366

REVISIONS	NO.	DESCRIPTION	BY	DATE
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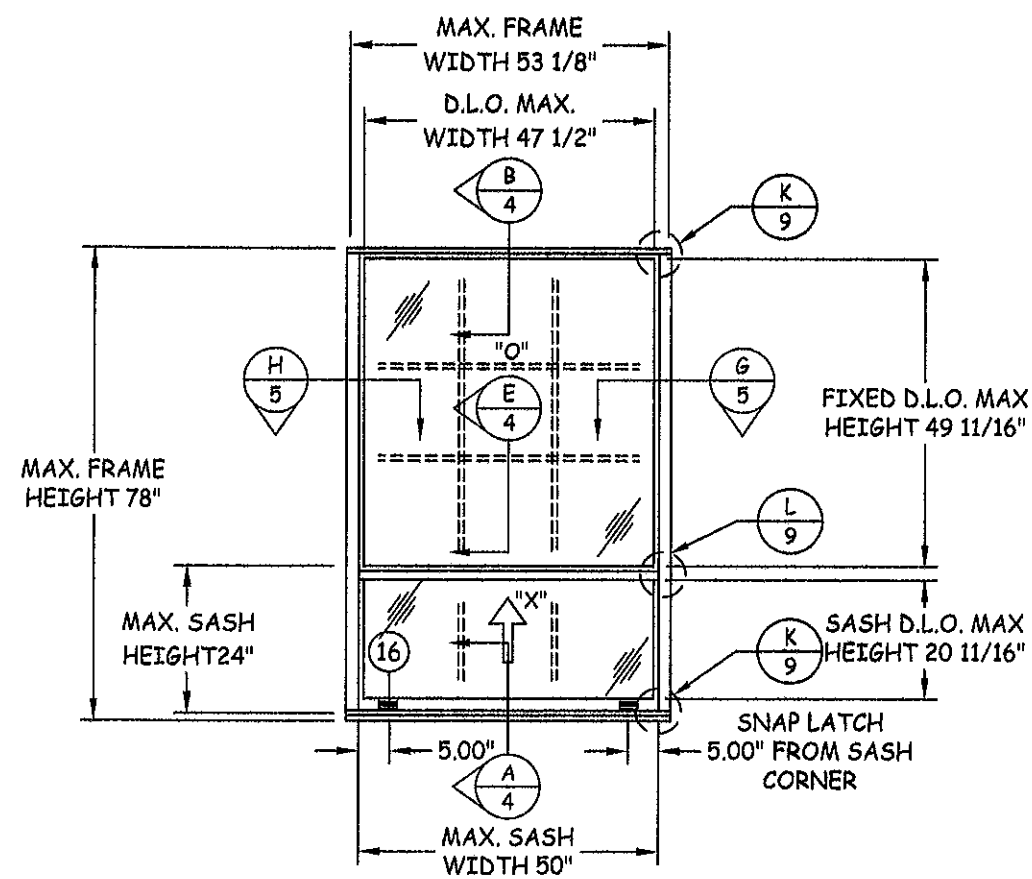
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FLORIDA P.E. NO. 68401
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
PEPE CERT. OF AUTHORIZATION NO. 03578

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0117.03
Expiration Date 03/14/2017
By: [Signature]
Miami Dade Product Control

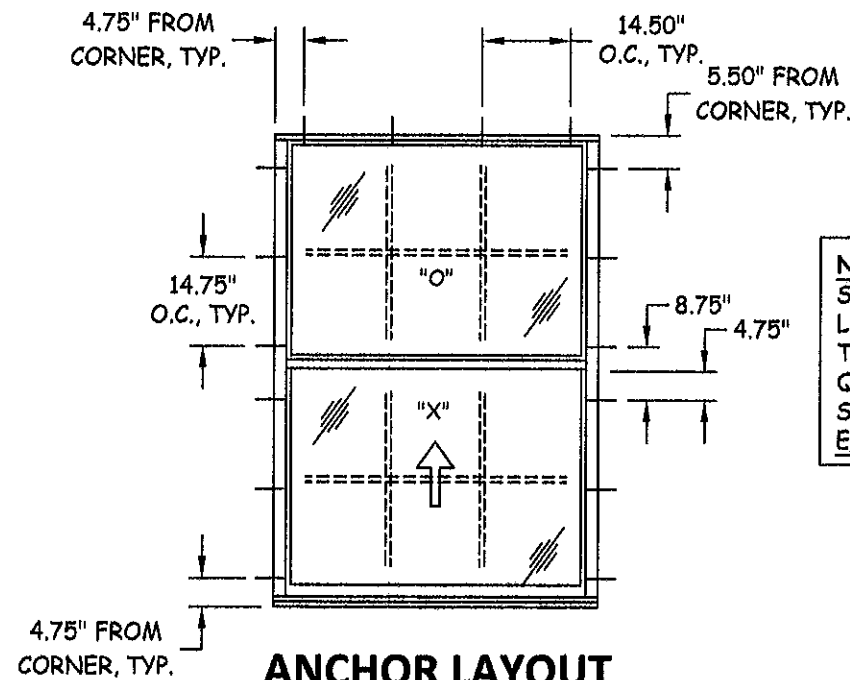
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CHK BY: HFN
SCALE: NTS
DWG #: ATR031
SHEET: 1 OF 9



TYPICAL ELEVATION
EQUAL LITE FLANGE FRAME

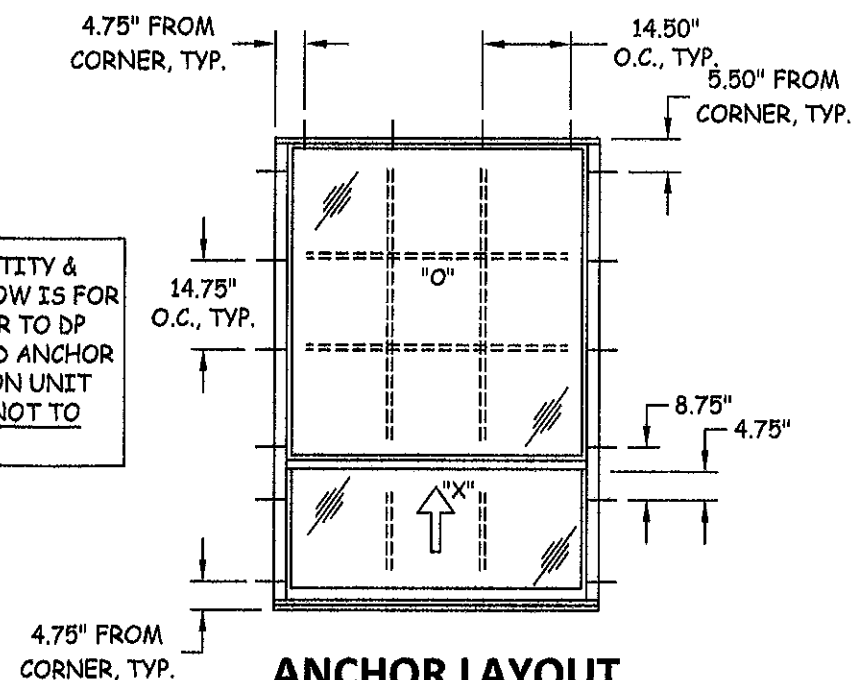


TYPICAL ELEVATION
UNEQUAL LITE FLANGE FRAME



ANCHOR LAYOUT
EQUAL LITE FLANGE FRAME

NOTE: ANCHOR QUANTITY & SPACING SHOWN BELOW IS FOR LARGEST UNITS. REFER TO DP TABLES FOR REQUIRED ANCHOR QUANTITIES BASED ON UNIT SIZE WITH SPACING NOT TO EXCEED AS SHOWN.



ANCHOR LAYOUT
UNEQUAL LITE FLANGE FRAME

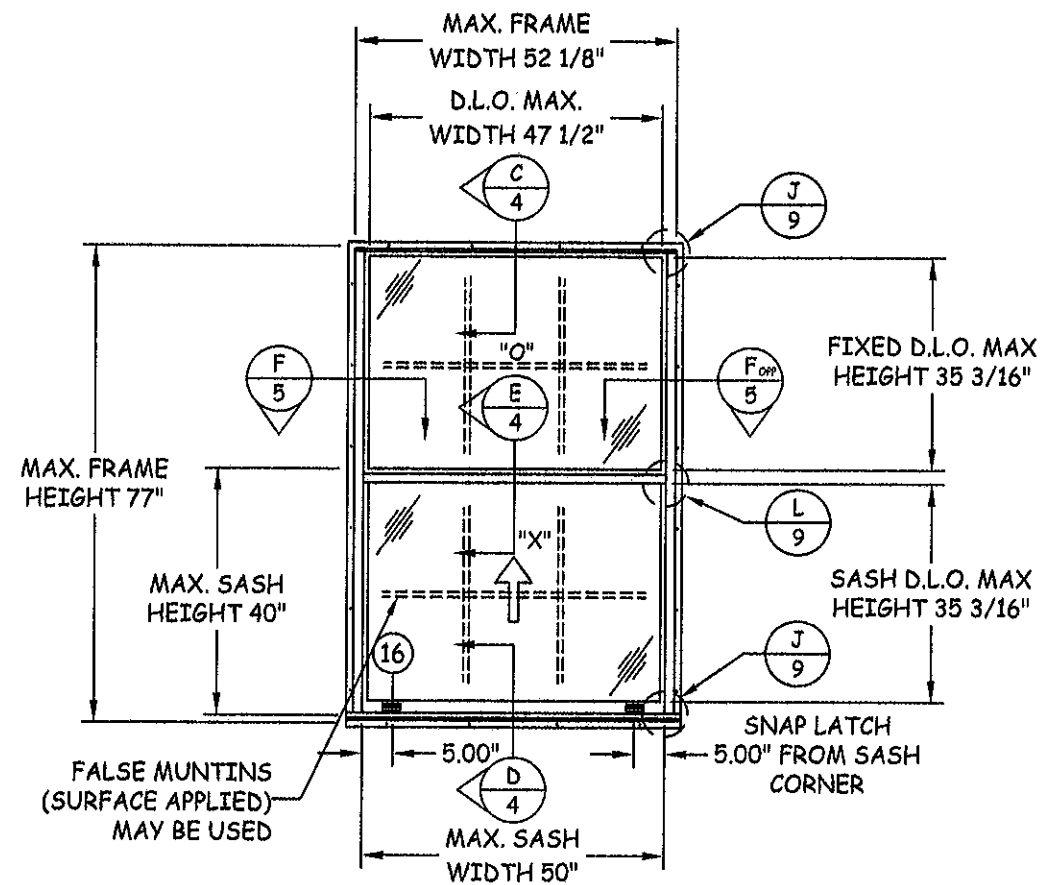
REVISIONS

NO.	DESCRIPTION	BY	DATE
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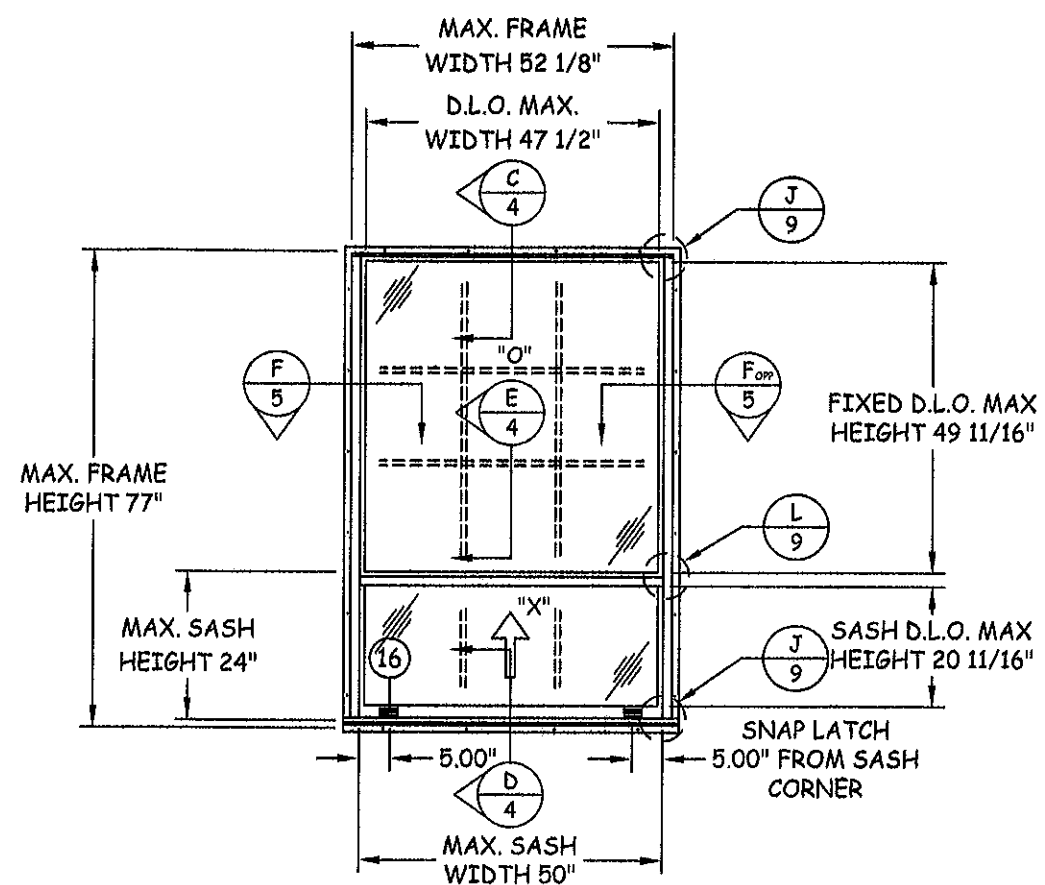
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as complying with the Florida
Building Code
Acceptance No. 12-0117.03
Expiration Date 03/14/2017
By: *[Signature]*
Miami Dade Product Control

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DWG #: ATRO31			
SHEET: 2 OF 9			

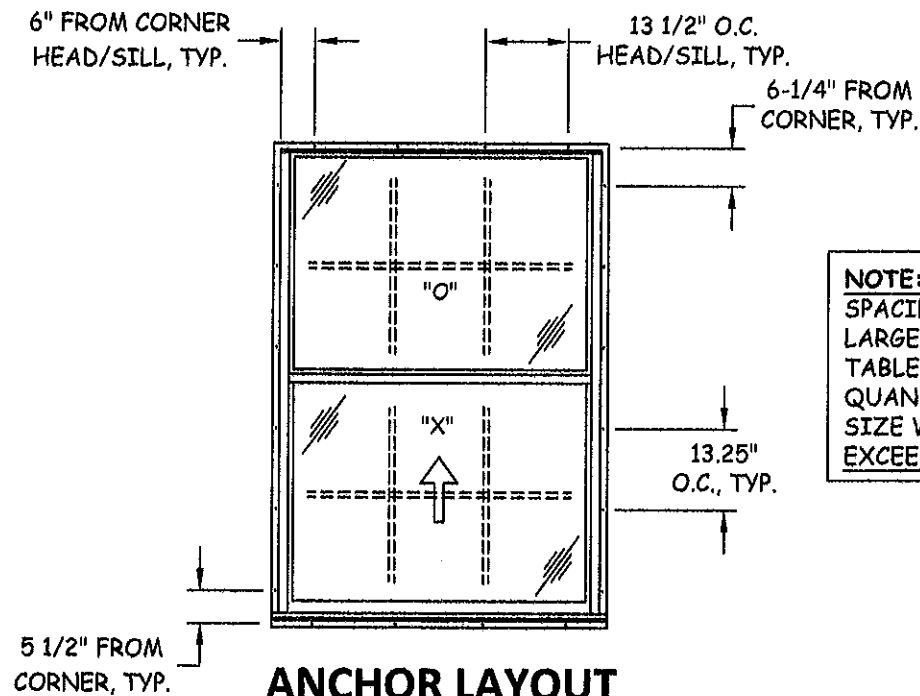
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3-19-12
ALEXIS SPYROU
FLORIDA P.E. NO. 68101
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
FIFE CERT. OF AUTHORIZATION NO. 35578



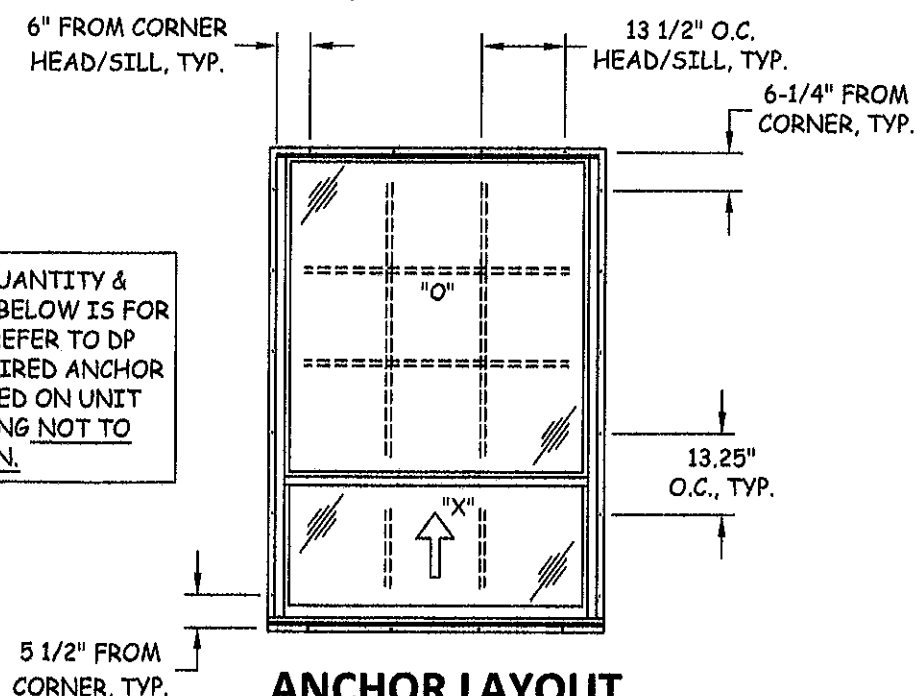
TYPICAL ELEVATION
EQUAL LITE FIN FRAME



TYPICAL ELEVATION
UNEQUAL LITE FIN FRAME



ANCHOR LAYOUT
EQUAL LITE FIN FRAME



ANCHOR LAYOUT
UNEQUAL LITE FIN FRAME

NOTE: ANCHOR QUANTITY & SPACING SHOWN BELOW IS FOR LARGEST UNITS. REFER TO DP TABLES FOR REQUIRED ANCHOR QUANTITIES BASED ON UNIT SIZE WITH SPACING NOT TO EXCEED AS SHOWN.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0117.03
Expiration Date 03/14/2017
By: [Signature]
Miami Dade Product Control

DATE:	12.07.11	DWN BY:	JLA	CHK BY:	HFN	SCALE:	NTS
DWG #:	ATRO31						
SHEET:	3 OF 9						

REVISIONS

NO.	DESCRIPTION	BY	DATE
A	PER MD COMMENTS 03.08.12	JLA	03.14.12

3-1912
ALEXIS SPYEROU
FLORIDA P.E. NO. 68101
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
FEE CERT. OF AUTHORIZATION NOTED 5/7/12

TITLE: MP5H/M41-51 ALUM.
SINGLE HUNG WINDOW
HORIZONTAL
SECTIONS

PREPARED BY:
BUILDING DROPS, INC.
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
PH: (407) 644-6957 FX: (407) 644-2366

NO.	DESCRIPTION	BY	DATE	REVISIONS		
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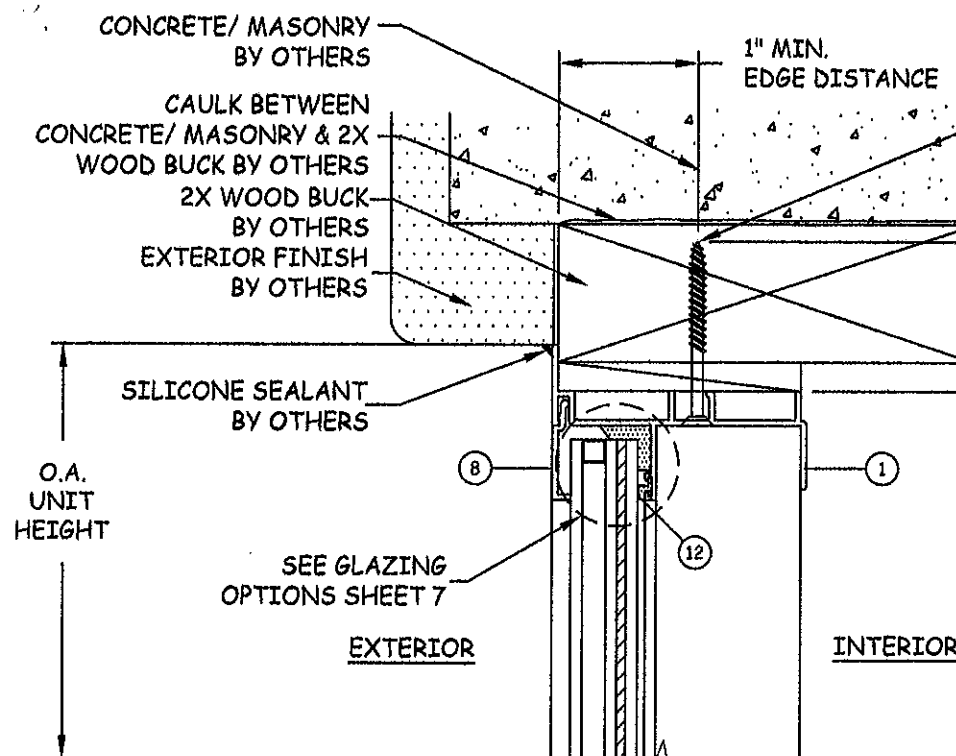
3-19-12

ALSO SEE SPECIFICATIONS
FLORIDA P.E. NO. 10810
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
P.E. CERT. OF AUTHORIZATION

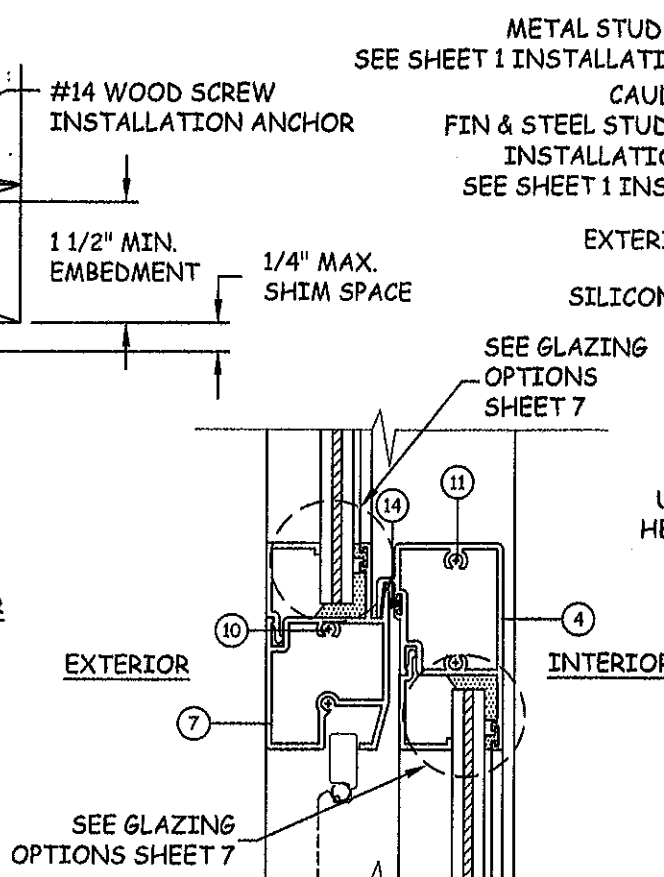
PRODUCT REVISED
is complying with the Florida
Building Code 12-0117.03
Acceptance No. 03114/2017
Expiration Date 03/14/2017
By *[Signature]*
Miami Dade Product Control

DATE: 12.07.11
DWN BY: JLA
CHK BY: HFN
SCALE: NTS

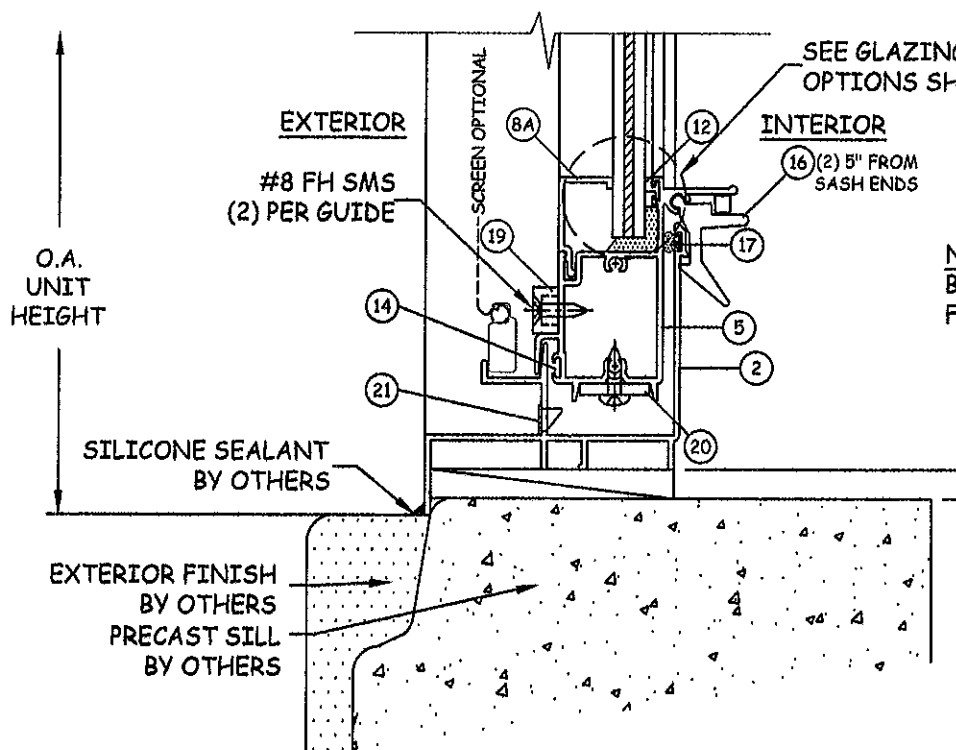
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SHEET: **4 OF 9**



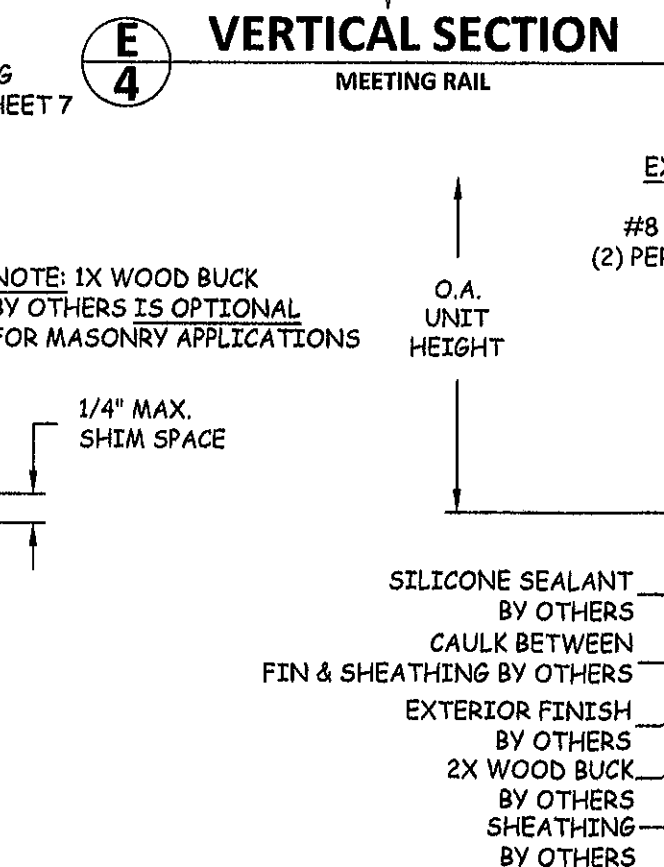
B
4
VERTICAL SECTION
HEAD - 2X WOOD BUCK
FLANGE FRAME INSTALLATION



C
4
VERTICAL SECTION
HEAD - METAL STUD
FIN FRAME INSTALLATION

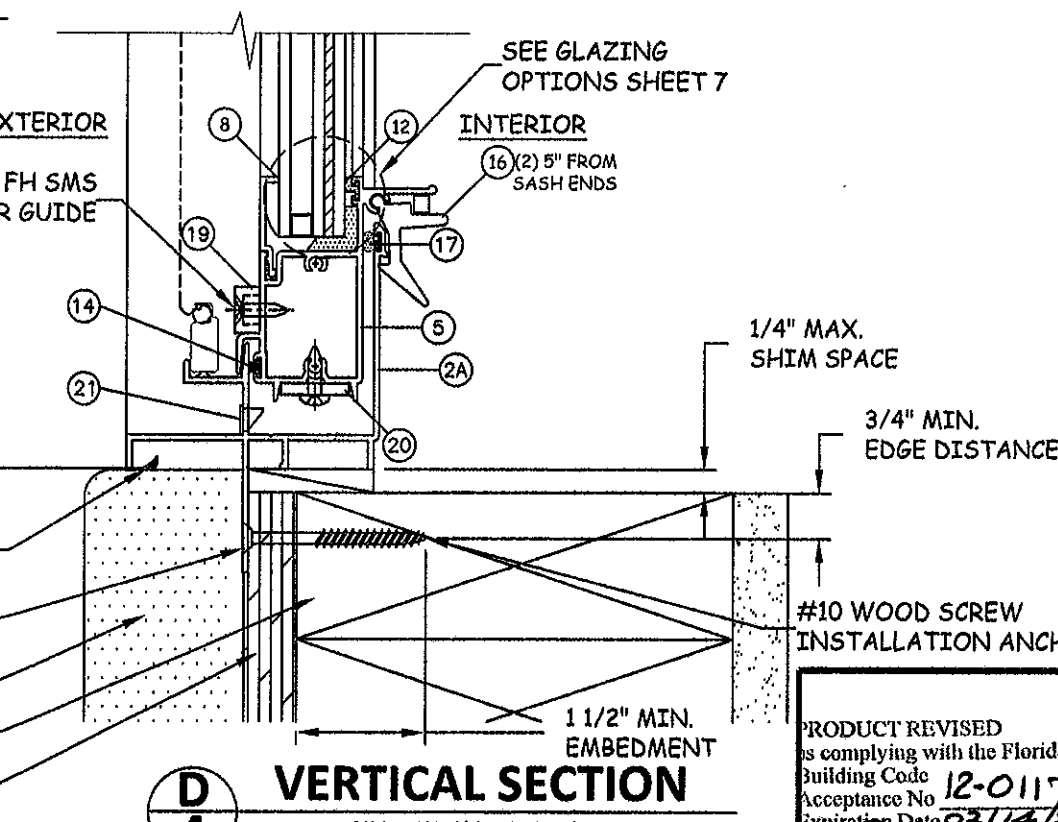


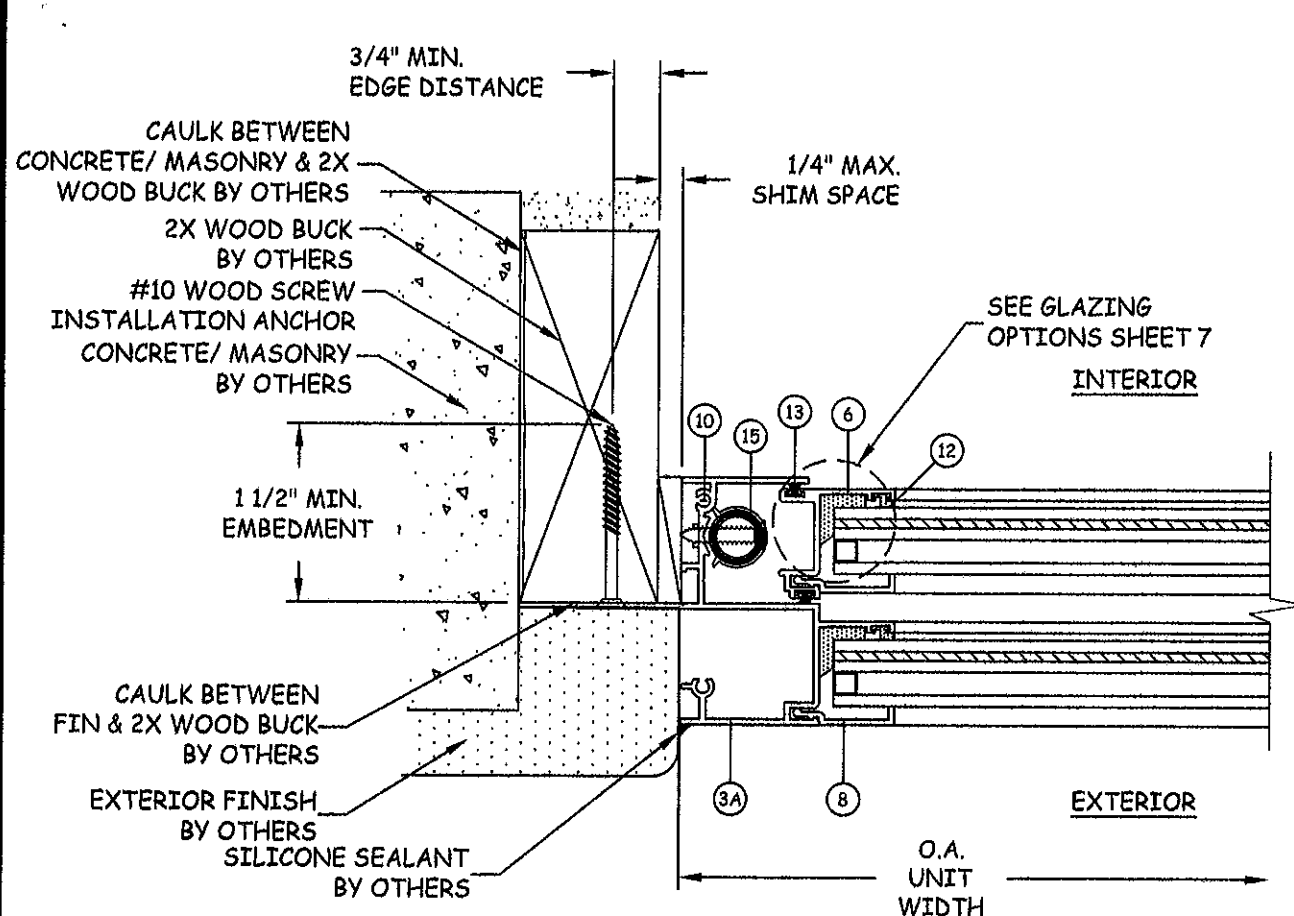
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4
VERTICAL SECTION
SILL - CONCRETE/MASONRY
FLANGE FRAME INSTALLATION



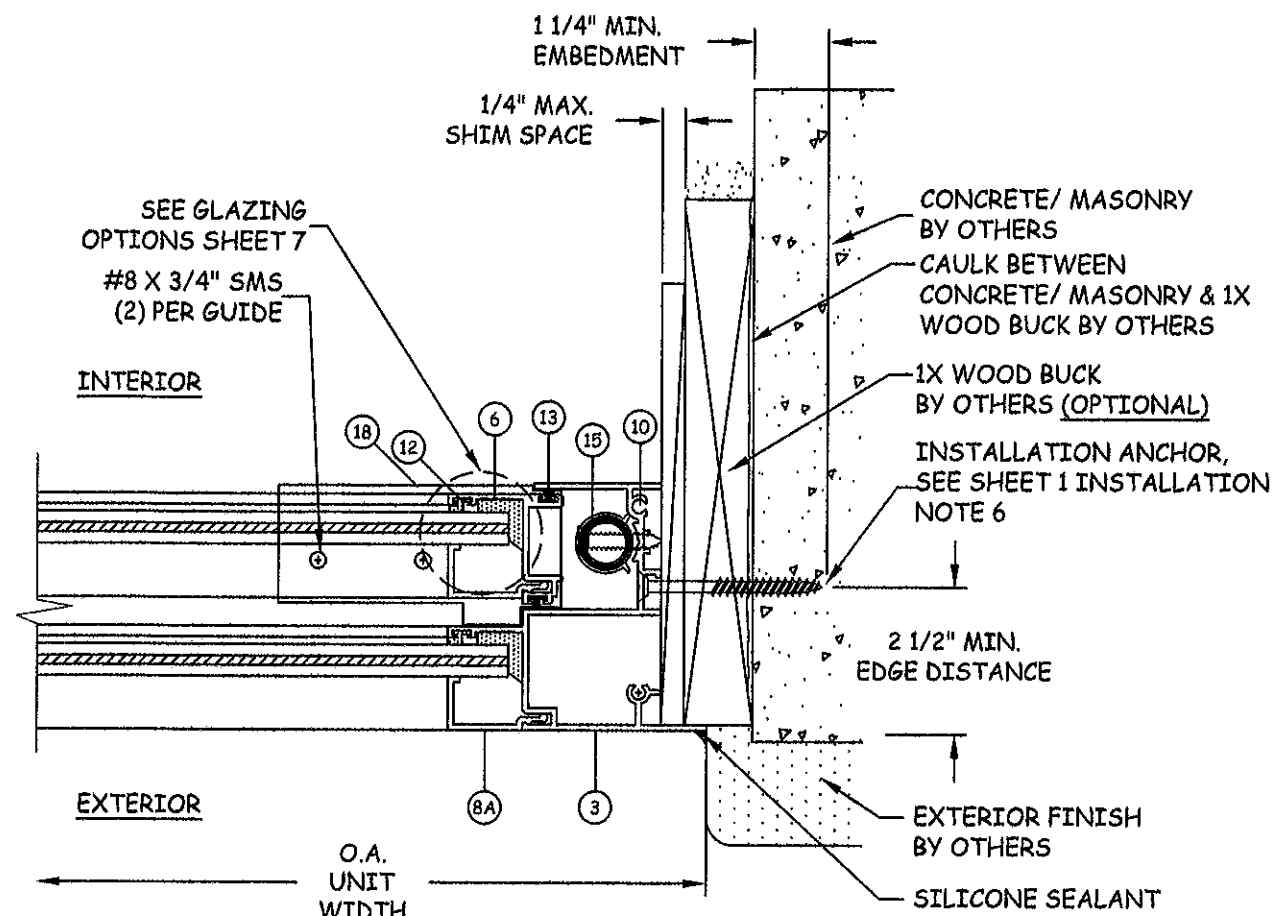
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VERTICAL SECTION
SILL - 2X WOOD FRAME
FIN FRAME INSTALLATION

E
4
VERTICAL SECTION
MEETING RAIL

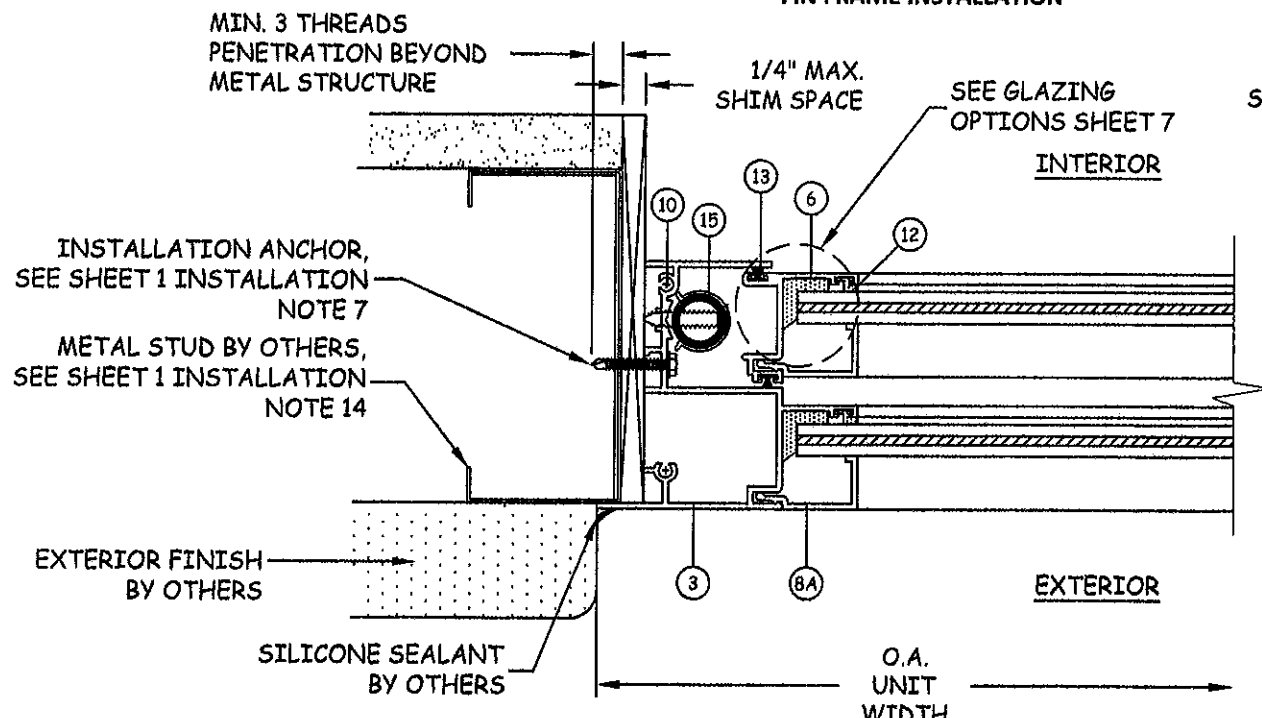




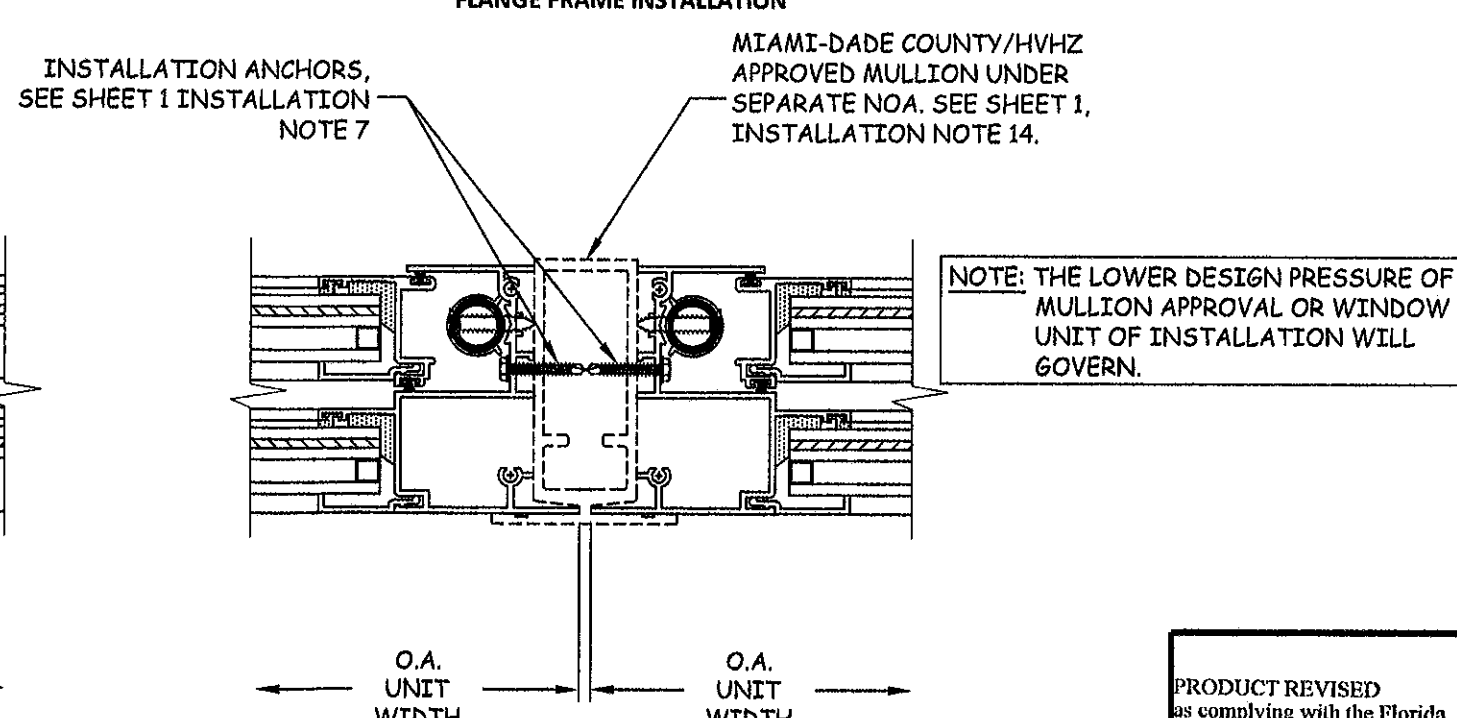
F5 HORIZONTAL SECTION
JAMB - 2X WOOD BUCK
FIN FRAME INSTALLATION



G5 HORIZONTAL SECTION
JAMB - CONCRETE/MASONRY
FLANGE FRAME INSTALLATION



H5 HORIZONTAL SECTION
JAMB-METAL STUD
FLANGE FRAME INSTALLATION



I5 HORIZONTAL SECTION
METAL TUBE MULLION DETAIL
TYPICAL INSTALLATION

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0117.03
Expiration Date 03/14/2017
Miami Dade Product Control

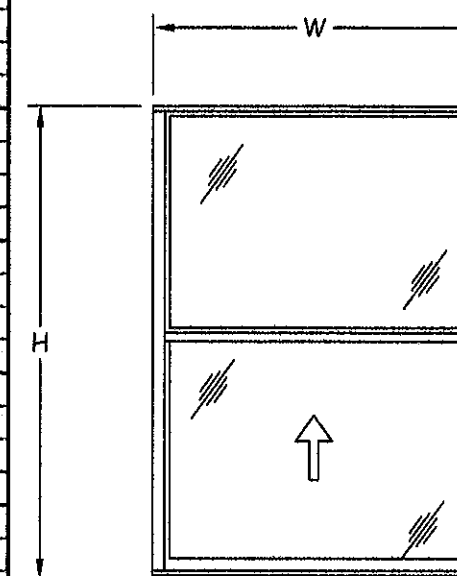
REVISIONS		
NO.	DESCRIPTION	DATE
A	PER MD COMMENTS 03.08.12	JLA 03.14.12

3-19-12
ALEXIS SPYROU
FLORIDA P.E. NO. 68101
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
FPE CERT. OF AUTHORIZATION NO. 28678

DATE: 12.07.11
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: ATR031
SHEET: 5 OF 9

EQUAL LITE SINGLE HUNG WINDOWS - DESIGN LOAD CAPACITY (PSF)										
H (IN.)	W (IN.)	No. of Fasteners per Jamb	G1		G2		G3		G4	
			POS	NEG	POS	NEG	POS	NEG	POS	NEG
36.00	24.00	3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	28.00	3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	32.00	3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.00	3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	40.00	3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	44.00	3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	48.00	3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.00	3	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
44.00	24.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	28.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	32.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	40.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	44.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	48.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
52.00	24.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	28.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	32.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	40.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	44.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	48.00	4	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
	52.00	4	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
60.00	24.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	28.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	32.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	40.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	44.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	48.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.00	5	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
72.00	24.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	28.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	32.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	40.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	44.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	48.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.00	6	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
77.00	24.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	28.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	32.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	40.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	44.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	48.00	6	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7
	52.00	6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6

EQUAL LITE SINGLE HUNG WINDOWS - DESIGN LOAD CAPACITY (PSF)										
H (IN.)	W (IN.)	No. of Fasteners per Jamb	G1		G2		G3		G4	
			POS	NEG	POS	NEG	POS	NEG	POS	NEG
25.000	18.125	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	25.500	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.000	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.125	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
37.375	18.125	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	25.500	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.000	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.125	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
49.625	18.125	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	25.500	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.000	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.125	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
57.000	18.125	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	25.500	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.000	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.125	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
62.000	18.125	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	25.500	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.000	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.125	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
77.000	18.125	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	25.500	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.000	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.125	6	70.0	70.0	73.4	73.4	73.4	73.4	73.4	73.4



EQUAL LITES

NOTE: ALL GLAZING LOAD RESISTANCE CAPACITIES HEREIN
COMPLY WITH ASTM E 1300-04.

TITLE: MP5H/M41-51 ALUM.
SINGLE HUNG WINDOW
EQUAL LITE DP TABLES

PREPARED BY: BUILDING DROPS, INC.
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
PH: (407) 644-6957 FX: (407) 644-2366

REVISIONS		DATE
NO.	DESCRIPTION	DATE
A	PER MD COMMENTS	03.08.12

[Signature]
3-19-12

ALEXIS SPYROU
FLORIDA P.E. NO. 68101
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
FPE CERT. OF AUTHORIZATION NO. 28578

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-011703
Expiration Date 03/14/2017

By *[Signature]*
Miami Dade Product Control

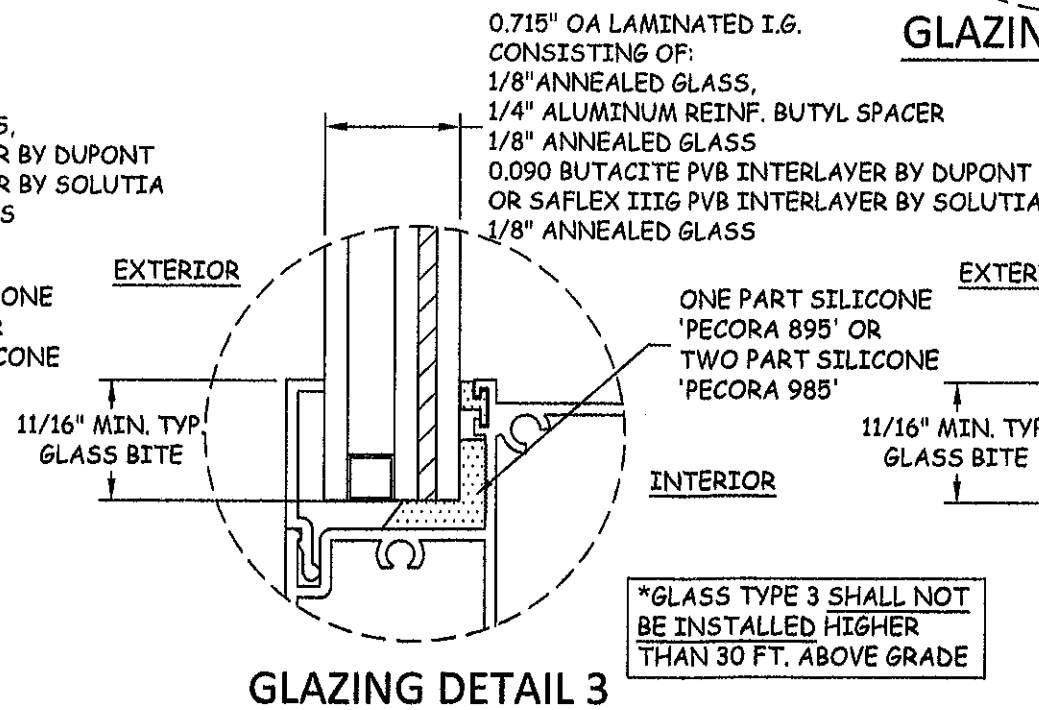
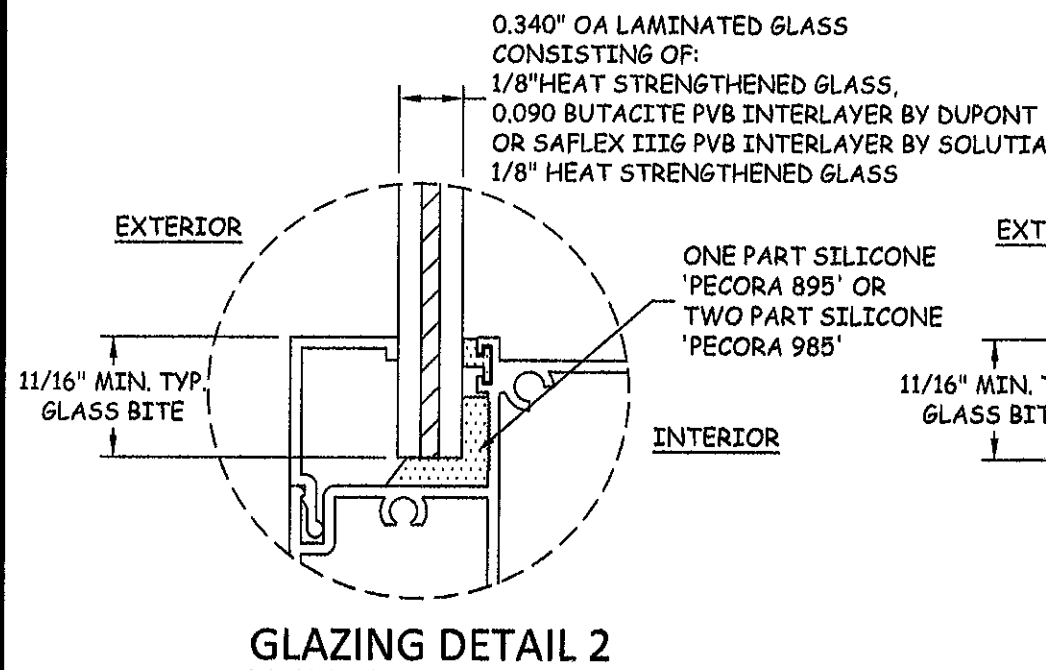
DATE: 12.07.11
DWN BY: JLA
CHK BY: HFN
SCALE: NTS

DWG #: **ATRO31**

SHEET: **6 OF 9**

UNEQUAL LITE SINGLE HUNG WINDOWS - DESIGN LOAD CAPACITY (PSF)										
H (IN.)	W (IN.)	No. of Fasteners per Jamb	G1		G2		G3		G4	
			POS	NEG	POS	NEG	POS	NEG	POS	NEG
52.00	24.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	28.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	32.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	40.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	44.00	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	48.00	4	78.7	78.7	80.0	80.0	80.0	80.0	80.0	80.0
	52.00	4	72.6	72.6	80.0	80.0	80.0	80.0	80.0	80.0
60.00	24.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	28.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	32.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	40.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	44.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	48.00	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.00	5	78.7	78.7	80.0	80.0	80.0	80.0	80.0	80.0
72.00	24.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	28.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	32.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	40.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	44.00	6	79.5	79.5	80.0	80.0	80.0	80.0	80.0	80.0
	48.00	6	75.8	75.8	80.0	80.0	78.1	78.1	80.0	80.0
	52.00	6	69.9	69.9	80.0	80.0	72.0	72.0	80.0	80.0
77.00	24.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	28.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	32.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.00	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	40.00	6	76.0	76.0	80.0	80.0	78.3	78.3	80.0	80.0
	44.00	6	70.9	70.9	80.0	80.0	73.1	73.1	80.0	80.0
	48.00	6	66.7	66.7	80.0	80.0	68.7	68.7	76.3	76.3
	52.00	6	63.0	63.0	80.0	80.0	64.9	64.9	72.1	72.1

NOTE: ALL GLAZING LOAD RESISTANCE CAPACITIES HEREIN COMPLY WITH ASTM E 1300-04.

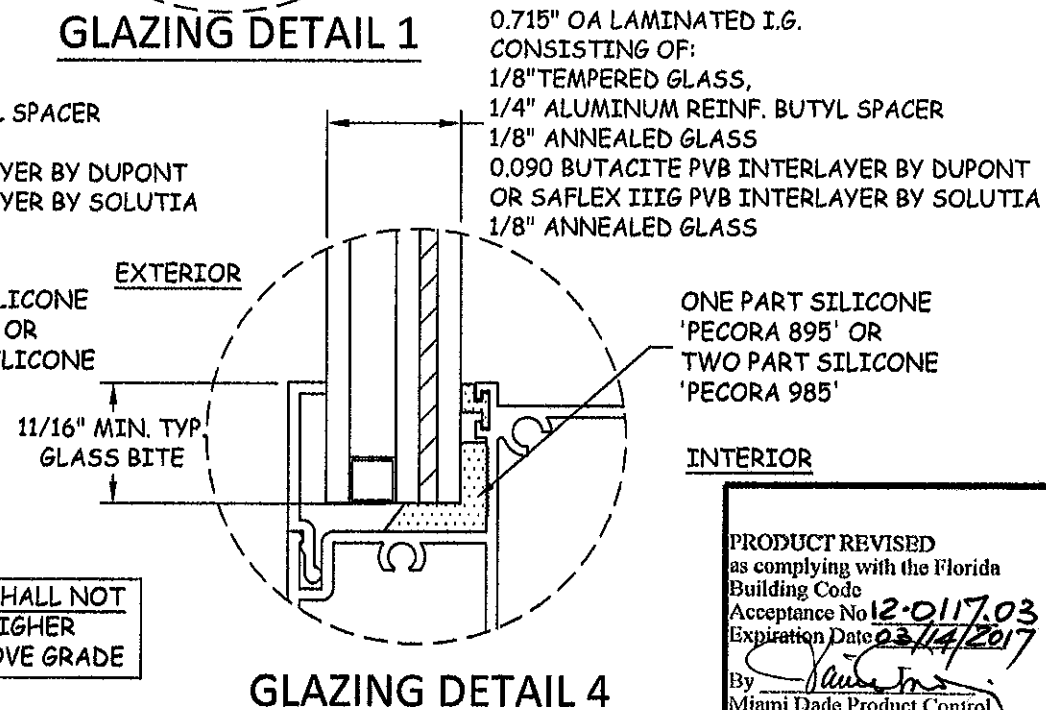
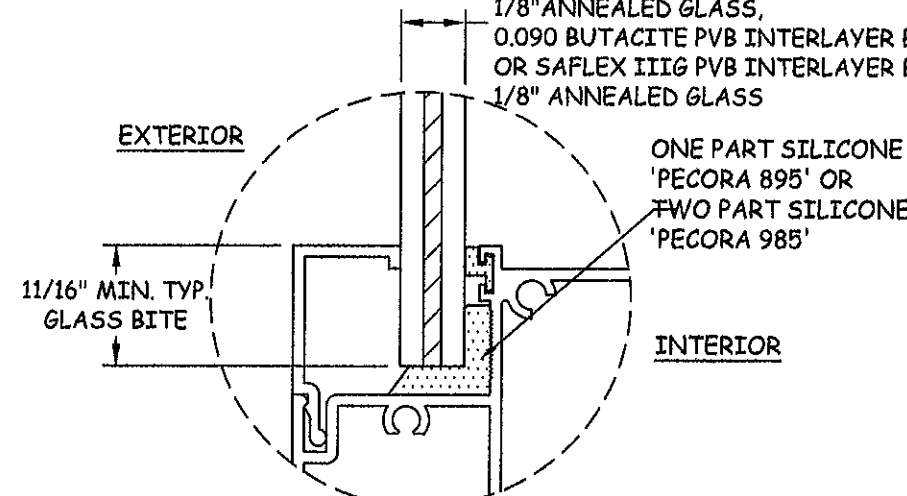


*GLASS TYPE 3 SHALL NOT
BE INSTALLED HIGHER
THAN 30 FT. ABOVE GRADE

LARGE MISSILE IMPACT RESISTANT ONLY*

UNEQUAL LITE SINGLE HUNG WINDOWS - DESIGN LOAD CAPACITY (PSF)										
H (IN.)	W (IN.)	No. of Fasteners per Jamb	G1		G2		G3		G4	
			POS	NEG	POS	NEG	POS	NEG	POS	NEG
49.625	18.125	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	25.500	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.000	4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.125	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	57.000	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
57.000	18.125	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	25.500	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.000	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.125	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	62.000	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
62.000	18.125	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	25.500	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.000	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.125	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	77.000	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
77.000	18.125	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	25.500	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	36.000	6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
	52.125	6	63.0	63.0	73.4	73.4	64.9	64.9	72.1	72.1

0.340" O.A. LAMINATED GLASS
CONSISTING OF:
1/8" ANNEALED GLASS,
0.090 BUTACITE PVB INTERLAYER BY DUPONT
OR SAFLEX IIIG PVB INTERLAYER BY SOLUTIA
1/8" ANNEALED GLASS



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0117.03
Expiration Date 03/14/2017
By *[Signature]*
Miami Dade Product Control

DATE: 12.07.11
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: ATR031
SHEET: 7 OF 9

ATRIUM
COMPANIES, INC.

9001 AMBASSADOR ROW
DALLAS, TEXAS 75247
PH: (214) 637-2696 FX: (214) 424-6734

TITLE: MP5H/M41-51 ALUM.
SINGLE HUNG WINDOW
UNEQUAL LITE DP TABLES &
GLAZING DETAILS
PREPARED BY: BUILDING DROPS, INC.
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
PH: (407) 644-6957 FX: (407) 644-2366

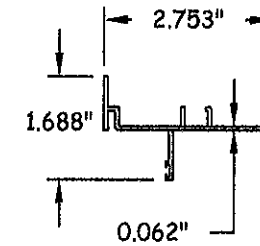
NO.	DESCRIPTION	BY	DATE
A	PER MD COMMENTS	JLA	03.14.12

[Signature]
ALEXIS SPYROU
FLORIDA P.E. NO. 68101
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
PEPE CERT. OF AUTHORIZATION NO. 28578

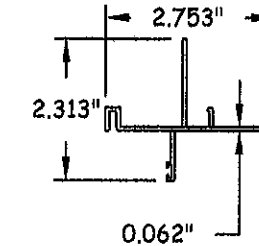
BILL OF MATERIALS

ITEM NO.	PART NO.	DESCRIPTION	MATERIAL	MANUFACTURER
1	KCO-241	FRAME HEAD (FLANGE)	6063-T6	-
1A	KCO-2051	FRAME HEAD (FIN)	6063-T6	-
2	KCO-2042	FRAME SILL (FLANGE)	6063-T6	-
2A	KCO-2052	FRAME SILL (FIN)	6063-T6	-
3	KCO-2043	FRAME JAMB (FLANGE)	6063-T6	-
3A	KCO-2053	FRAME JAMB (FIN)	6063-T6	-
4	KCO-2045	SASH TOP RAIL	6063-T6	-
5	KCO-2046	SASH BOTTOM RAIL	6063-T6	-
6	KCO-2047	SASH STILE	6063-T6	-
7	KCO-2044	FIXED MEETING RAIL	6063-T6	-
8	RP-800	GLAZING BEAD- MONO.	RIGID PVC	-
8A	RP-801	GLAZING BEAD- I.G.	RIGID PVC	-
9	KCO-242	SASH STOP	6063-T6	-
9A	-	ALT. SASH STOP	PVC	-
10	-	FRAME ASSEMBLY SCREW	-	#8 X 1" PHPH SMS
11	-	VENT ASSEMBLY SCREW	-	#8 X 1" PHPH SMS
12	VTF-2009	GLASS SPACER	-	POLYPROPYLENE - DUROMETER R78 TPE - DUROMETER 70 SHORE A
13	W23151NG	WEATHERSTRIPPING	-	ULTRAFAB .150X.187 OR EQUIV.
14	W23171NG	WEATHERSTRIPPING	-	ULTRAFAB .170X.187 OR EQUIV.
15	-	5/8" SPIRAL BALANCE	-	CALDWELL ULTRALIFT/SPIREX
16	L-049	LATCH	NYLON	5" FROM EACH END (HUGHES SUPPLY)
17	U-4333	BULB WEATHERSTRIPPING	-	Q-LON .300X.190
18	13130/13031	VENT TOP GUIDE	NYLON	ASHLAND PRODUCTS
19	13129	VENT BOTTOM GUIDE	NYLON	ASHLAND PRODUCTS
20	KCO-2056-A	BALANCE BRACKET	6063-T6	-
21	LCS-068	WEEP HOLE COVER	NYLON	LCS PRECISION MOLDING

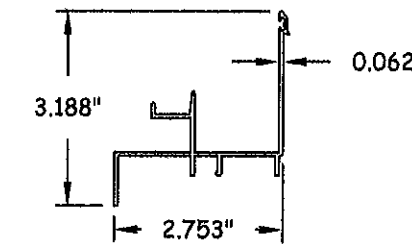
1 FRAME HEAD (FLANGE)
ALUMINUM 6063-T6



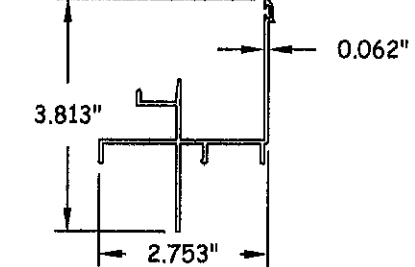
1A FRAME HEAD (FIN)
ALUMINUM 6063-T6



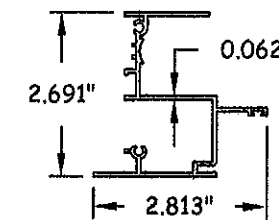
2 FRAME SILL (FLANGE)
ALUMINUM 6063-T6



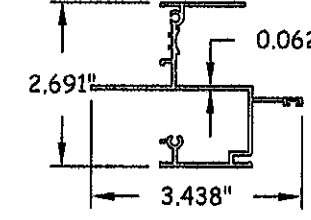
2A FRAME SILL (FIN)
ALUMINUM 6063-T6



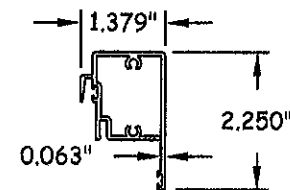
3 FRAME JAMB (FLANGE)
ALUMINUM 6063-T6



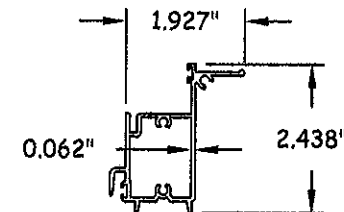
3A FRAME JAMB (FIN)
ALUMINUM 6063-T6



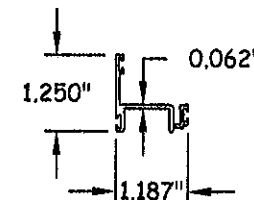
4 SASH TOP RAIL
ALUMINUM 6063-T6



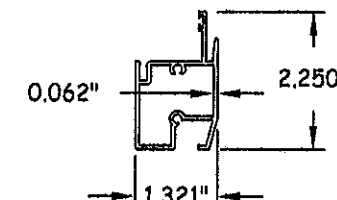
5 SASH BOTTOM RAIL
ALUMINUM 6063-T6



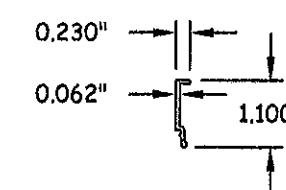
6 SASH STILE
ALUMINUM 6063-T6



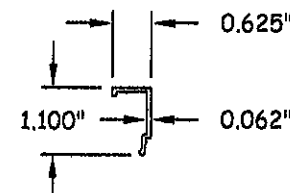
7 FIXED MEETING RAIL
ALUMINUM 6063-T6



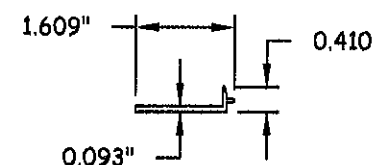
8 GLAZING BEAD-INSULATING GLASS
RIGID PVC



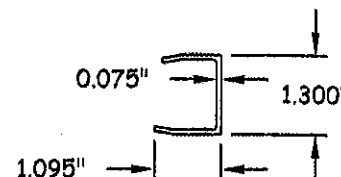
8A GLAZING BEAD-SINGLE GLAZE
RIGID PVC



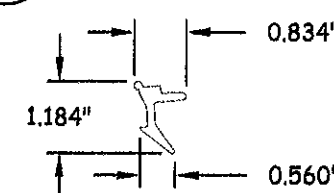
9 SASH STOP
ALUMINUM 6063-T6



9A ALT. SASH STOP
ALUMINUM 6063-T6



16 LATCH
NYLON



ATRIUM
COMPANIES, INC.

9001 AMBASSADOR ROW
DALLAS, TEXAS 75247
PH: (214) 637-2696 FX: (214) 424-6734

TITLE: MESH/M41-51 ALUM.
SINGLE HUNG WINDOW
COMPONENTS &
BILL OF MATERIALS
PREPARED BY: BUILDING DROPS, INC.
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
PH: (407) 644-6957 FX: (407) 644-2366

NO.	DESCRIPTION	BY	DATE
A	PER MD COMMENTS 03.08.12	JLA	03.14.12

[Signature]
3-19-12
ALEXIS SPYGLASS
FLORIDA P.E. NO. 68401
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
FPE CERT. OF AUTHORIZATION NO. 28578

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0117.03
Expiration Date 03/14/2017
By: *[Signature]*
Miami Dade Product Control

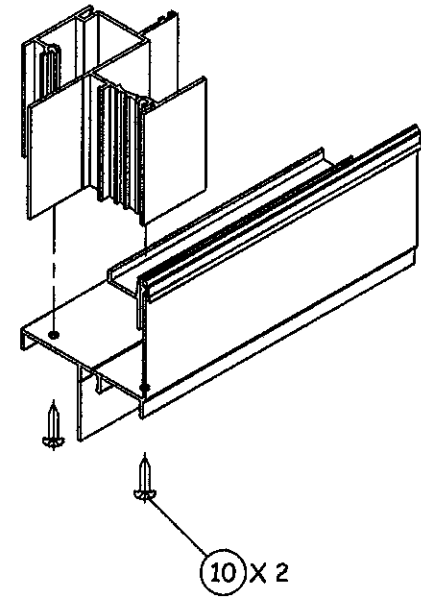
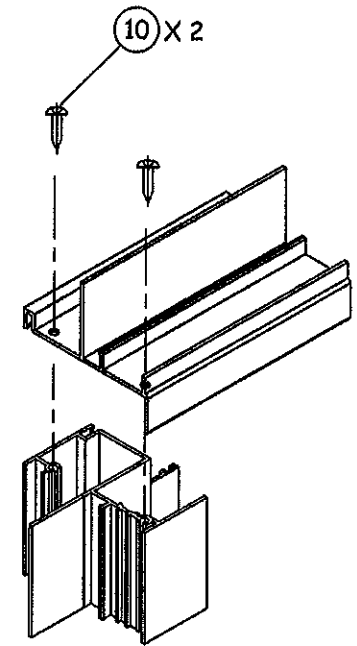
DATE: 12.07.11
DWN BY: JLA
CHK BY: HFN
SCALE: NTS
DWG #: ATR031
SHEET: 8 OF 9

TITLE: MP5H/M41-51 ALUM.
SINGLE HUNG WINDOW
CORNER SECTION
ASSEMBLIES

PREPARED BY:
BUILDING DROPS, INC.
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
PH: (407) 644-6957 FX: (407) 644-2366

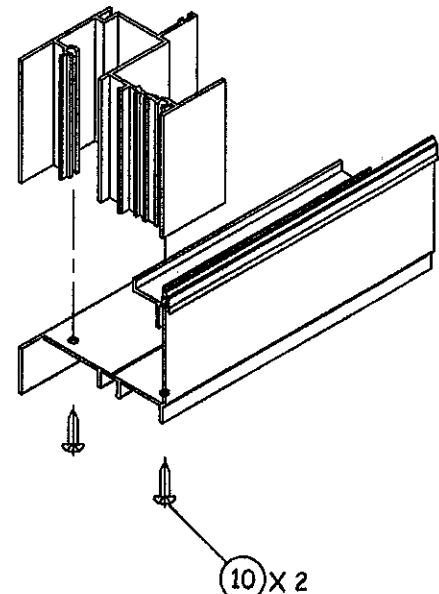
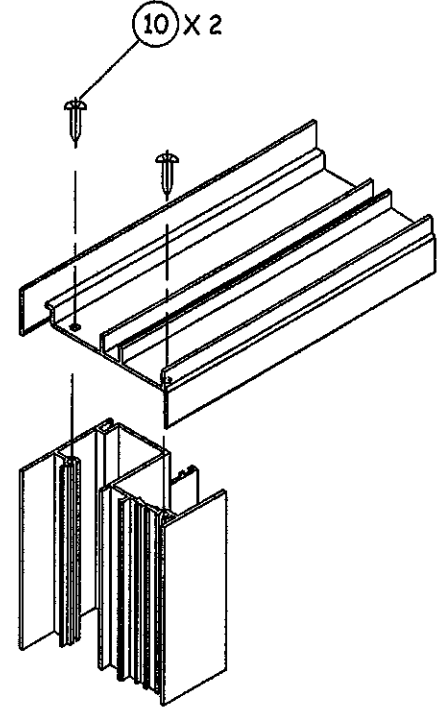
REVISIONS			
NO.	DESCRIPTION	BY	DATE
A	PER MD COMMENTS 03.08.12	JLA	03.14.12

[Signature]
ALEXIS SPYRON
FLORIDA P.E. NO. 88703
127 W. FAIRBANKS AVE., STE. 438
WINTER PARK, FL 32789
FBI# CERT. OF AUTHORIZATION NL 28578



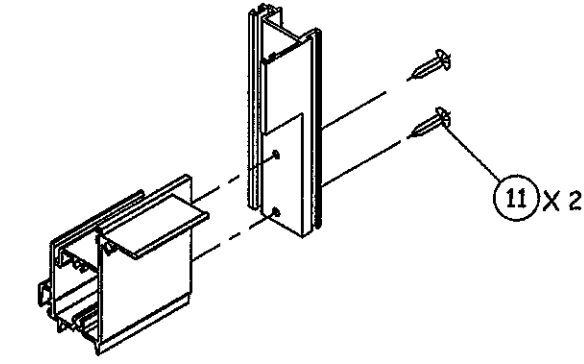
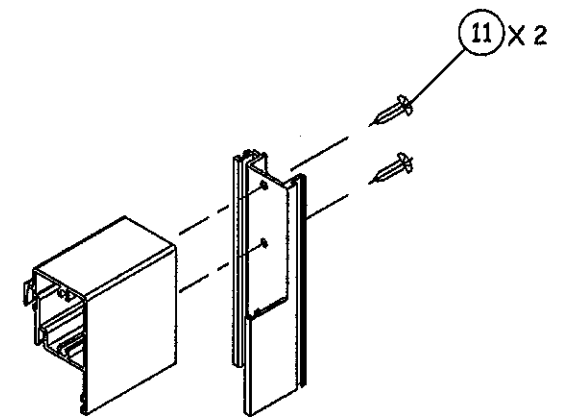
J
9

CORNER SECTION
FIN FRAME CORNER ASSEMBLY
TYPICAL



K
9

CORNER SECTION
FLANGE FRAME CORNER ASSEMBLY
TYPICAL



L
9

CORNER SECTION
OPERABLE SASH CORNER ASSEMBLY
TYPICAL

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0117.03
Expiration Date 03/14/2017
By *[Signature]*
Miami Dade Product Control

DATE: 12.07.11
DWN BY: JLA
CHK BY: HFN
SCALE: NTS

DWG #: **ATRO31**
SHEET: **9 OF 9**